## ATARI INTEROFFICE HEMO

To: Andy Jones Date: 9/23/

From: Joe Days

Subject: 3688 Controller Ontrons

A market research feeter group study will be conducted oursing the first uses of dictabet no soultage a variety of possible controllers for the 2650 wide game system. Protopyses of several controller concepts are being developed in presentation for the wideout Day to the 2650 schedule research of the controller of the 2500 schedule swiftlersions of existing controllers (i.e., for which tooling exists). The controller oftens for which prototypes are currently being developed are as follows:

-- A proline controller with no modifications.

--A proline controller with bumps on the actuator that act to guide the josstick to the nearest of the eight josstick positions.

--A proline controller with un octagon shaped mechanical stop to guide the joystick to the nearest of the pight joystick positions.

--A proline controller with a diamond shaped mechanical stop to guide the Joystich to the noarest of the four x-y Joystick positions (would be a removable insert on the normal proline

--- A digital version of the Paw (5200) controller with an octaons shaped mechanical stop.

--- digital version of the Pan (S200) controller with an octagon shaped mechanical stop and a rotating insert that converts the mechanical stop to a diamond shape for moze

-A self-centering enalog for controller with additional circuitry that allows it to act like a digital controller or a paddic controller for 2000 games and as a digital or analog controller for 2000 games. A rotating insert may be edded to reduce the size of the mechanical stop when yeard as a digital

-- A self-rentering analog Pan controller with gimballed potentionsters (if the prototypes can be nade in laws).

All of the controllers to be tosted will be self-refitering.

If there are any other suggestions for additional controller features that could be incorporated into any existing controller housings (even if it requires some modification to the housing), please bring them to my attention as soon as possible since all prototypes must be completed by September 30.

cci B. Sinneth

S. Nielsen G. Allen

P. Mallow T. Kennedy

D. Stubben C. Goy

K. McKinzes

B. Coppick

D. Kraner

C. Moran

D. La D. Larro

E. Breeze